

yumeng ma

HUMAN-AI INTERACTION · ACCESSIBILITY · VISUAL & SOCIAL COMPUTING

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Education

University of Washington

Seattle, WA

INCOMING PHD IN COMPUTER SCIENCE AND ENGINEERING

Brown University

Providence, RI

SC.M IN COMPUTER SCIENCE (HUMAN-COMPUTER INTERACTION)

2022 - Present

GPA: 4.0 / 4.0

Coursework: UI/UX, Designing Humanity Centered Technology, HCI Seminar, Collaborative Robotics, Computer Graphics

Arizona State University

Tempe, AZ

B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY

2019 - 2022

Barrett Honors College

GPA: 4.0 / 4.0

Summa Cum Laude

Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Publications

* *Equal Contribution*

CONFERENCE PROCEEDINGS

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. 2023. "Together but not together": Evaluating Typing Indicators for Interaction-Rich Communication. In Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI '23). *Paper*

Ian Gonsler, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. 2023. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. Human Interaction and Emerging Technologies (IHET-AI 2023): Artificial Intelligence and Future Applications. *Paper*

SHORT PAPERS & EXTENDED ABSTRACTS

Yumeng Ma* and Jiahao Ren*. 2023. ProactiveAgent: Personalized Context-Aware Reminder System. In The 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23 Adjunct). *Paper*

Ian Gonsler, Mandy He, Kevin Hsu, Leon Lau, Arun Kavishwar, Jinha Kang, Maya Fleischer, Li June Choi, Vanessa Chang, Asad Khan, Ray Sun, Sicheng Li, **Yumeng Ma**, Michael Chandler, and Keyu Zhu. 2023. Integrating Interfaces into Furniture: New Paradigms for Ubiquitous Computing, Mixed Reality, and Telepresence within the Built Environment In Proceedings of the 6th Conference on Media Architecture Biennale. (MAB '23). *Paper*

Experience

Brown Department of Neuroscience

Providence, RI

COMPUTER VISION RESEARCH ASSISTANT

2023 - Present

- Building a visual prosthesis software to help blind and low vision users locate and find everyday objects.

Brown + NASA

Providence, RI

MOBILE DEVELOPER RESEARCH ASSISTANT

2023 - Present

- Developing a sound and haptic enabled space visualization cross platform mobile app for blind and low vision users.

Civillience

Remote

PRODUCT MANAGER & UI/UX DESIGNER INTERN | LIAISON BETWEEN FRONTEND AND UIUX

2023

- Led the UI/UX team to design a web-based app with interactive health data visualizations and create reusable components for the design system to maintain consistency throughout the product.

Brown Department of Engineering

Providence, RI

DESIGN RESEARCH ASSISTANT

2022 - 2023

- Introduced a new paradigm for the integration of AR into laptop and desktop displays to enable local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

UCLA HCI Lab

Los Angeles CA

HCI RESEARCH INTERN

2023

- Led the development of a proactive reminder system that takes in user context, history, and spoken interactions by leveraging LLMs and personal agents.

Brown HCI Lab

Providence, RI

DISTRIBUTED RESEARCH EXPERIENCES FOR UNDERGRADUATES INTERN

2022

- Designed novel typing indicators and found that they enhance user co-presence in written communication through in depth surveys and interviews.

ASU SoLET Lab

Tempe, AZ

PSYCHOLOGY RESEARCH ASSISTANT

2022

- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission

Tempe, AZ

COLLABORATOR

2021-2022

- Developed a web app that allows users to interact with the Psyche Spacecraft model and led user studies with biometric data analysis that showed the app increased public engagement.

Awards, Fellowships, & Grants

2024 NSF Graduate Research Fellowship, NSF

2024 Paul G. Allen School Diamond Fellowship, University of Washington

2023 Tapia Celebration of Diversity in Computing Conference Scholarship, Brown University

2019 - 2023 Microsoft DisAbility Scholarship, Microsoft

2022 Google CS Research Mentorship Program Fellowship, Google

2022 Virtual Grace Hopper Celebration Scholarship, AccessComputing

Teaching

Spring '22 Information Assurance, TA for Adam Doupe and Tiffany Bao, ASU

Extracurricular & Work Activities

2021 - Present Member, AccessComputing

2022 - 2024 Master's Representative, Brown University CS Diversity Committee

2023 Student Volunteer, UIST

2020 - 2021 Microsoft Support / Xbox Advocate Contract, Microsoft

Providence, RI

San Francisco, CA

Tempe, AZ

Skills

Programming	Python, C/C++, C#, Java, Unix/Linux, ROS
Web/Mobile	HTML, CSS, Javascript, Typescript, React, React Native Vue, APIs, Git
Game Dev	Unity, OpenGL
Data	Jupyter Notebook, MySQL, MATLAB, JSON
Design	UI/UX, Adobe Creative Suite, Figma, Wireframing, Fusion360, Blender
Hardware	Arduino, Rasberry Pi